



Purpose



To enhance warfighting skills of Air Defense Artillery units in the areas of planning, coordination, integration, synchronization, and execution of combat operations in support of the Brigade Combat Team at the National Training Center.





Agenda



- Mission (NTC & ADA)
- AARs
- NTC Primer
- O/C Organization & Tasks
- MILES
- Reconstitution
- Safety
- Threat (OPFOR)
- Conclusion



National Training Center Mission

TO PROVIDE TOUGH, REALISTIC, JOINT AND COMBINED ARMS TRAINING FOCUSED ON DEVELOPING SOLDIERS, LEADERS AND UNITS OF AMERICA'S ARMY FOR SUCCESS ON THE 21ST CENTURY BATTLEFIELD.

ADDITIONALLY, THE NTC PROVIDES A VITAL SOURCE OF EXPERIENCE BASED INFORMATION AND DATA ESSENTIAL TO DOCTRINE, EQUIPMENT, TRAINING, AND FORCE DEVELOPMENT IN ORDER TO IMPROVE THE FORCE.

Air Defense Mission

COACH, TEACH, AND MENTOR BCT LEADERS, STAFFS, AND THE ADA BATTERY ON THE APPLICATION AND EXECUTION OF THE AIR DEFENSE BATTLEFIELD OPERATING SYSTEM IN SUPPORT OF THE COMBINED ARMS FIGHT IMPROVE THE ADA WARFIGHTING SKILLS OF THE BRIGADE COMBATTEAM.





Keys to a Good Rotation

- Bring an open mind ——Focus on learning
- No "cookie cutter" solution
 Don't think

 everything you have done up to now is the greatest
- thing some things don't work
- Agility
 Best dividends are rewarded to agile thinkers who think fast on their feet and clearly communicate intentions
- Discipline Doing what is right when no one

National Training Center



Leaders



Must Know and come prepared:

- Aerial IPB How/When to Integrate with S2 IPB temp
- MDMP

 How/What products must you have to part with the description of the generation of the generation of the generation of the general content of the general con
- Rehearsals

 Not a question of do we execute them...How
 Terrain kit boxed up now, format establish
 Who attends? 1SG? Why not?
- DST, DSM, Execution checklist > For unit or O/Cs
- Early Warning→ Plan in place, triggers for movement, SOR Management...The most important battery essential task!! Why?



Success



SUCCESS OF THE ADA BATTERY AT THE NTC IS NOT DETERMINED BY HOW MANY AIRCRAFT YOU SHOOT DOWN - RATHER IT IS HOW WELL WE HAVE INTEGRATED OUR ADA ASSETS AS A COMBAT MULTIPLIER TO THE BDE TO ACCOMPLISH THE MISSION

- Patton addressing his troops training in the Desert Training Center in 1942:
- "If you can work successfully here in this country be no difficulty at all to kill the assorted sons of bitche will meet in any other country."





RSOI Data Card

- 1. SHOOT
 - a. Wpns Boresighted, Screened, Zeroed
 - b. MILES Instrumented, FMC
- 2. MOVE
 - a. Vehs PMCSd, Load Plan, FMC
 - b. Maps posted, NVGs
- 3. COMMUNICATE
 - a. COMSEC Loaded, SR/LR Radio Check
 - b. IFF, DEW, Challenge/Password
 - c. PMCS, FMC
- 4. SUSTAIN
 - a. Classes of Supply, CLS Bags, 5988Es

 National Training Center



Pre-Battle Card

- 1. WARNO Issued and to Standard
- 2. OPORD Issued and to Standard
- 3. Rehearsal Conducted and to Standard
- 4. Orders
- 5. Graphics
- 6. R & S
- 7. Security
- 8. Class III/V
- 9. Boresight
- 10. PCC / PCI
- 11. Risk Management
- 12. IFF Status
- 13. HTU Status





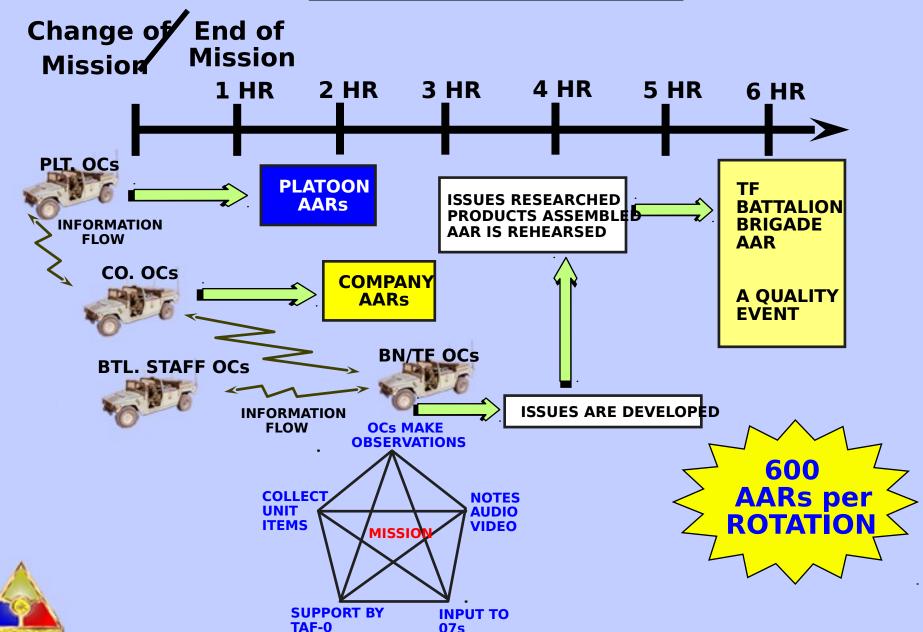
After Action Reviews



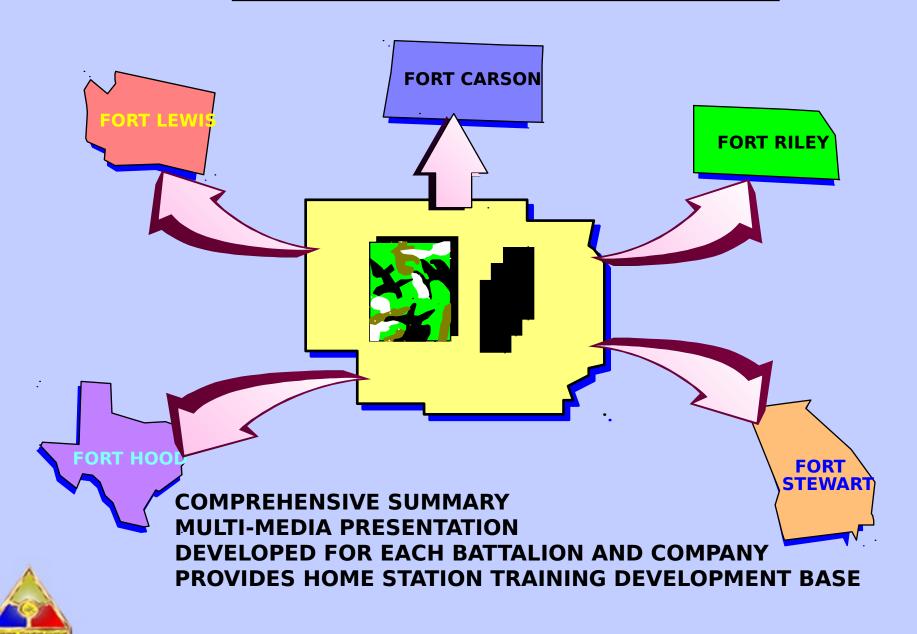
- Most important aspect of the National Training Center
- Take precedence over all other activities
- What happened
- Why it happened
- How to improve / sustain performance
- How can we apply today's lessons learned to the next fight?



AAR TIME LINE



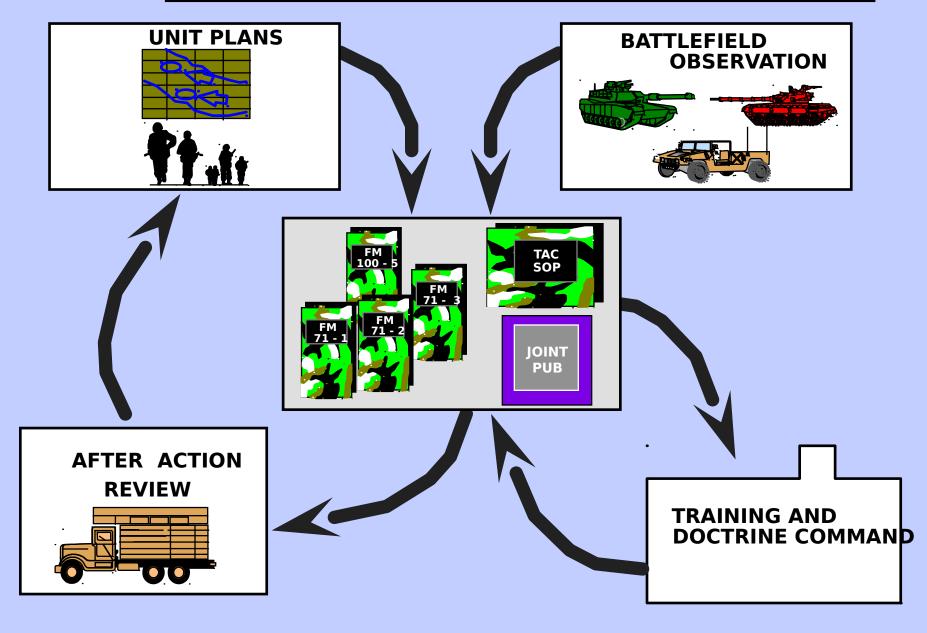
TAKE HOME PACKAGE



The National Training Center

- The NTC provides the most realistic & unique training environment In the world today
- The NTC is approximately 1,000 square miles, roughly the size of Rhode Island
- OCs are neutral observers who observe and analyze performance throughout the planning, preparation and execution of all missions
- OCs enforce the ROE and ensure all MILES equipment is operational

DOCTRINE BASED TRAINING



Key Aspects of The NTC

Comprehensive "Road to War" Training

Contingency Based Scenarios

Instrumented Battlefield

Doctrine Based Training

Joint Training

Dedicated Opposing Force

Full-Time
Observer Controlle

Sophisticated Live Fire Training

Training Process (After Action Review)

Climate and Topography

Temperatures

Average Summer High - 100* F Average Winter Low - 37* F Highest Record Temp - 125* F

Precipitation - 4-6 inches per year

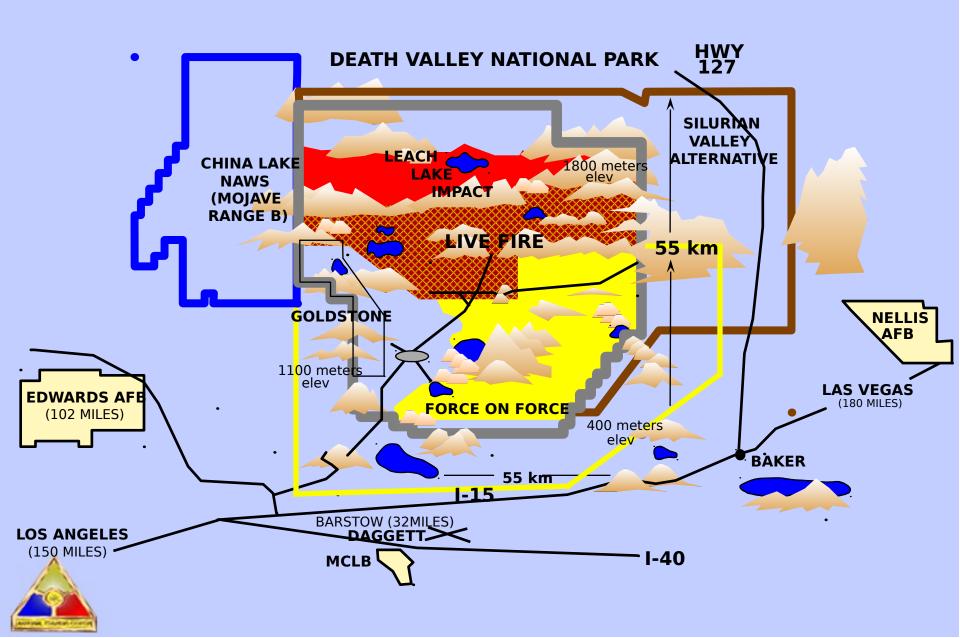
High Desert

High Point - 6818 Feet

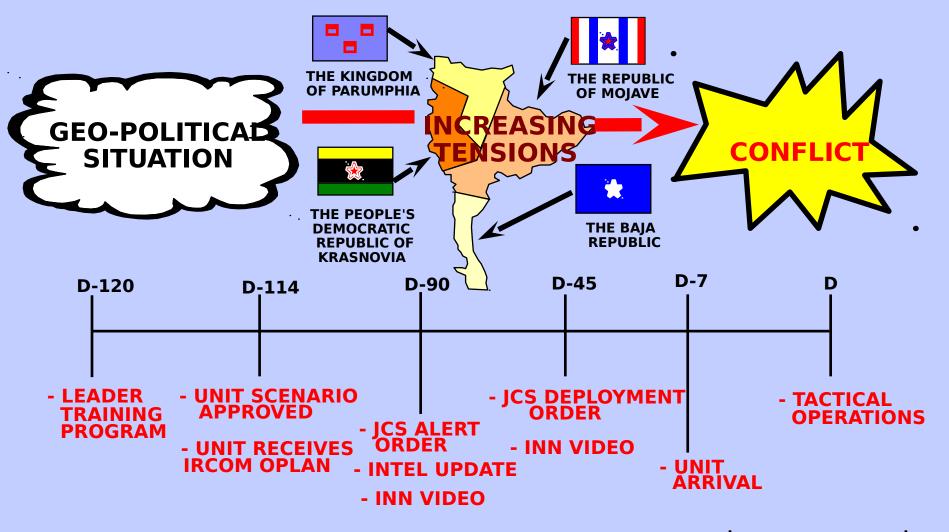
Low Point - 1300 Feet

High Winds Common

NTC Training Area



Tierra Del Diablo











RESULTS

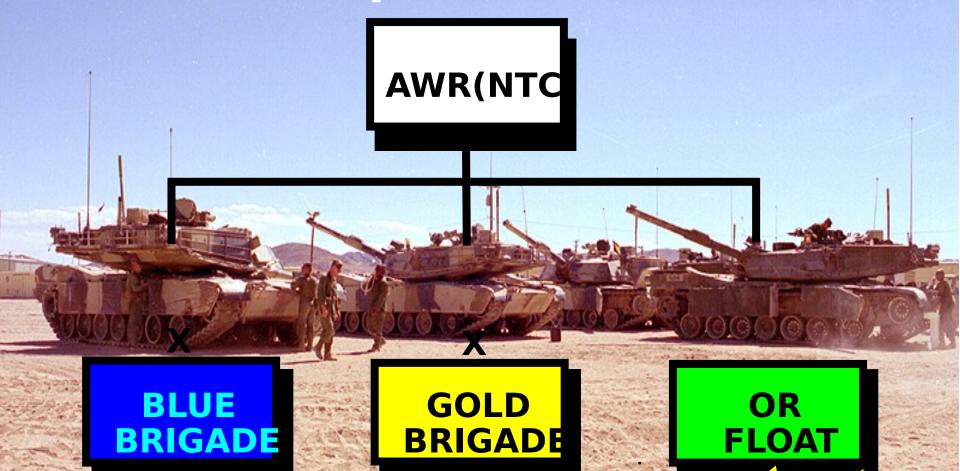
"I started the war with 108 tanks and 86 armored personnel carriers. The air attacks caused a loss of my armored personnel carriers while 90 of my 108 remained serviceable. Within minutes of contact was American armored forces on 26 February, I had los them all.

Colonel Mohammed Ashad Commander 50th Armored Brigade Tawakalna Republican Guard

A Company Commander's response to a question concerning his units' success during Desert Storm...

" I had already fought the battle three times at the National Training Center."

NTC Prepositioned Fleet



Replicates Worldwide AWR stocks

- Procedures
- Battlebooks

Contractor Maintained Co/Tm Draw in Brigade Sets 970 TRACKS 2400 WHEELS 388 OTHERS

Reception, Staging, Onward Movement and Integration

OPERATIONS

ENTRY OPERATIONS

DEPLOYMENT

PREDEPLOYMENT ACTIVITIES

MOBILIZATION

POST CONFLICT/
POST CRISIS
OPERATIONS

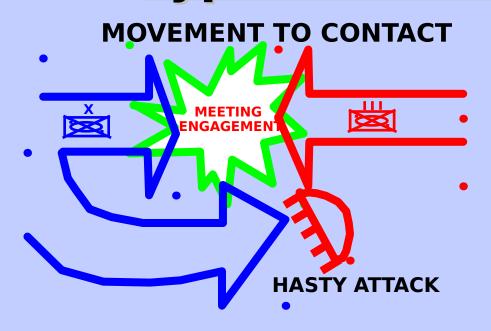
REDEPLOYMENT

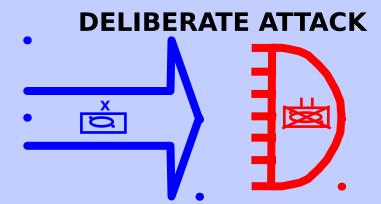
DEMOBILIZATION

FM 100-5

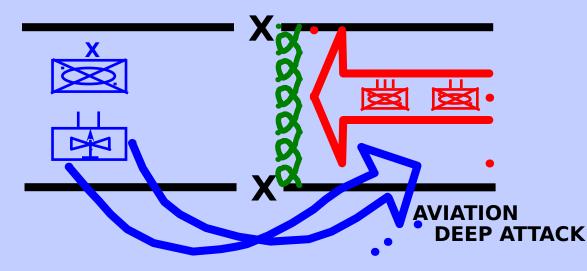
TRAIN THE FORCE

Typical Tactical Missions





DEFEND IN SECTOR



OTHER OPERATIONS

- RECONNAISSANCE
- SECURITY
- FORCE PROTECTION
- CONTINUOUS LOGISTICS

O/C Organization & Tasks





Who Are the OCs



As Coaches

- Analyze application of doctrine and assist unit training through formal and informal AARs
- Help unit improve tactics, techniques and procedures

As Observers

 Observe and analyze unit performance throughout mission planning, preparation and execution

As Controllers

Apply battlefield effects, assess casualties and enforce the ROE





ADA Trainers (OPS GRP)



LTC **SFC SFC** SFC SFC SSG SSG SSG SSG SalteMaynarHummgbhnsonPope HarriGaldwelGruidl Booth Pond



















General Support Brigade Trainers (Broncos)

CPT Meno

CPT SFC SoliRuterbories

CPT SFC Essary Jones

CPT SFC RothermelMaxwell



Division AD Officer (Lizard)



Armor TF Trainers (Cobras)



Mechanized **TF Trainers** (Scorpions)



Light





OCs Will Not



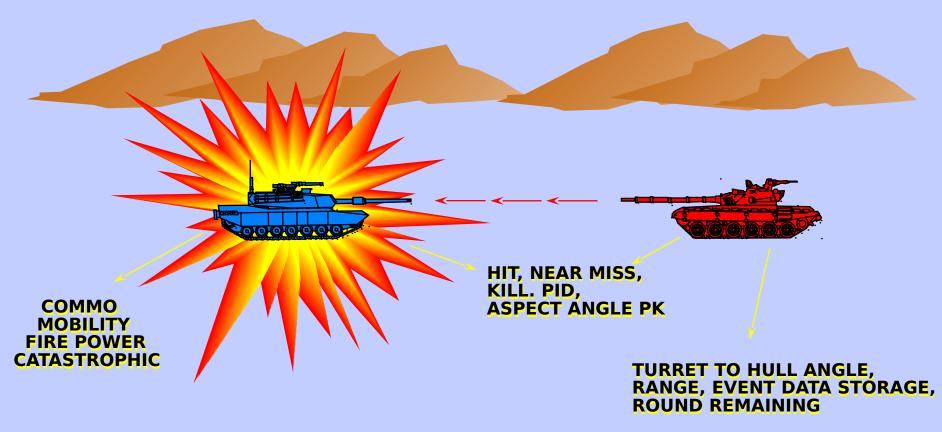
- Substitute for higher headquarters
- Circumvent unit chain of command
- Interfere in planning or execution of missions except safety and ROE







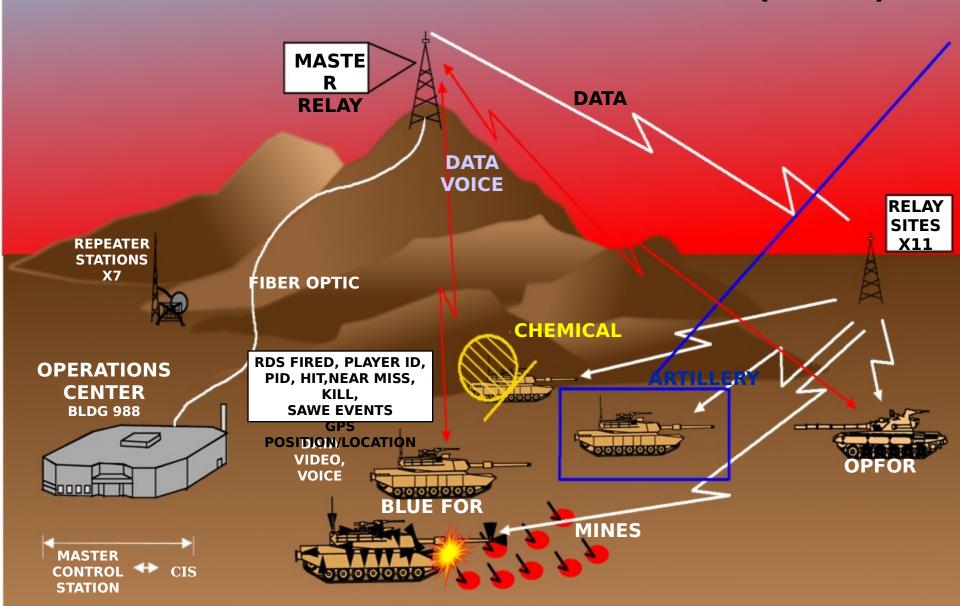
Direct Fire Simulation

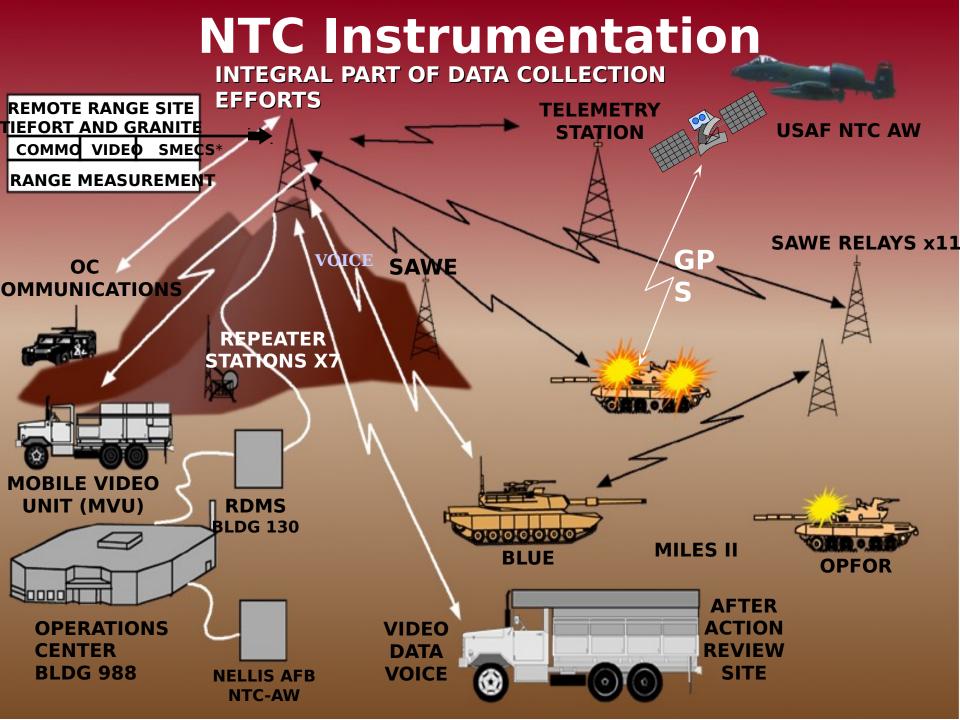


2200 TOTAL PLAYERS (2000 PLAYERS & 200 SPARES) WITH CAPABILITY TO EXPAND TO 4000



Indirect Fire Simulation SIMULATED AREA WEAPONS EFFECTS (SAWE)





AIR WARRIOR PROGRAM



LARGEST JOINT CAS TRAINING PROGRAM IN TH WORLD 150-250 SORTIES/ROTATION **BOTH BLUEFOR AND OPEOR PROVIDED CAS** AIRCRAFT COME FROM ALL PARTS OF **CONUS/EUROPE** AIRCRAFT CARRY AN AIR WARRIOR INSTRUMENTATION PACKAGE WITH INTEGRATI INTO NTC - INSTRUMENTATION SYSTEM TRAIN THE WAY WE PLAN TO FIGHT



Stinger MILES vs Actual



- Actual Stinger
 - 4 variants (Basic, POST, RMP, Block I)
 - Range > 5 km
 - IFF capable
 - Both TC and GNR have a Stinger at the firing position
 - Open sight "iron sights"
 - Fire and forget
 - 10< sec crew drill

- MILES Stinger
 - Pk based on Basic version of Stinger
 - Range 3750
 - No IFF capability
 - 1 per BLUFOR team
 - Optical sight
 - Uses only two of the three superelevation reticles
 - Track target for 8-10 seconds
 - Extremely high failure rate

National Training Center



FOFT MILES vs Actual



- Avenger / Linebacker
 - **Range** > 5 km
 - Fire and Forget
 - 4 variants (Basic, POST, RMP, Block I)

FOFT

- Range 3750
- Must track for 8-10 seconds after trigger pull (until pod superelevates)
- Based on Basic
 Stinger missile
 capabilities





MILLE

S



- Who wears MILES:
 - Everybody forward of the rear BDE boundary will have MILES to include Visitors and Contractors
 - If switching between Kevlar and CVC helmet the MILES halo must also be swapped over
 - Those not wearing complete MILES gear, or without a miles casualty card will be automatically assessed by an OC as a KIA.



MILE

5



- •MILES is the units responsibility, period!
- MILES will be incorporated into your PCC/PCIs
 - Boresight
 - Clean laser lenses
 - Test fire weapons
 - Replace batteries
- Lithium vehicle batteries will be supplied by the OCs, 9-volt batteries are the unit responsibility
- Report MILES malfunctions to the OCs
- Vehicles will be checked prior to battles by the OCs to insure MILES is operational



MILES Contact Teams



- •MILES is the units responsibility, period!
- MILES contact teams are placed to correct MILES deficiencies (0900-1430 hrs, approximately).
- Your OC will notify you when and where to go.
- MILES contact teams are manned by civilians, do not argue with them. If there is a problem let your OC know.
- MILES signature card
- Remove ATWESS from Weapons(Avengers, Stingers etc....)
- Do not change bumper numbers





MILES During the Battle



- When MILES goes off during battles, stop look at the VDD for information, then initiate the casualty card. If unsure call your OC.
- •To indicate that you are a casualty remove your Kevlar during (Force-on-Force only).
- •If your MILES is NMC, no matter what you do right the other guy will win, MILES must work to win.
- MILES Cheating will not be tolerated





Disconnecting MILES



- Do not disconnect the lithium vehicle battery or gel pack (vehicle stops tracking)
- Do not disconnect the slave receptacle connector (except for slaving if the vehicle will not start)
- Disconnecting MILES will cause you to be pulled from the fight





MILES ATWESS



- •Always:
 - -Use caution when handling ATWESS
 - -Wear eye protection
 - -Handle with leather glove
 - -Check back blast area
 - -Load as if a real munition
 - -Keep out of pockets
- Do not scrape paint off of the primer
- Color coding
 - -Stingers are BLUE
 - -Dragon are GREEN
 - -Viper are YELLOW
 - -TOW are RED







Engaging the OPFOR



- Physical contact between OPFOR and BLUEFOR is forbidden
- If pursued by an OPFOR vehicle do not drive your vehicle in such a manner as to put your crew in an unsafe situation.
 Stay calm and try to maneuver away from the OPFOR.



Safety Kill & Charging Rule



- Close combat is not permitted, the following distances apply:
 - Between vehicles, or vehicles 50 meters
 - personnel: 50 meters
 - Dismounted soldiers: 10 meters
- Minimum arming distances also apply
 - Example:
 - Dragons, TOWs, and AT5s are ineffective at less than 50 meters.





Safety Kill & Charging Rule



- Safety Kill
 - -When a target appears at less than the prescribed distance, TCs will cross there arms over their faces to signify they are engaging.
 - -The killing vehicle(s) must discharge their weapons in a safe direction to account for the kill(s), if this does not happen an assessment will not be made on the vehicle being engaged.
 - -Charging Rule
 - -Intentional charging will result in the charger being assessed as a penalty kill.
 - -Do not approach track vehicles





Casualty Cards



RTD - Is given to at least one person on each vehicle, he is there to maintain accountability only, cannot continue in fight and does not have to evacuated.

Walking Wounded - Must be evacuated within 6 hrs

Treatment by a CLS adds 30 minutes to the time

When told by an OC to activate your casualty card, that is the report you send as casualties, NOT "I'm dead" there is no time limit to send last dieing breath.



Personnel Reconstitution



- Casualties evaced to C-MED become:
 - -Replacements if treated in time
 - -DOWs if not treated in time
- Replacements move from C-MED to Rear CP
- DOWs move from GREGG site to Rear CP
- Replacements/DOWs are briefed, inspected and moved from Rear CP to unit control





Vehicle Reconstitution



- Losses must be reported by bumper #, vehicle type and unit to rear CP
- OCs will periodically ask for report from rear CP
- 5 hours after BDE S4 receives the report, the vehicle will receive a re-key time.
- NO REPORT, NO REKEY!





NBC & FASCAM



NBC

OCs will exchange one-for-one M256 kits

FASCAM

- Usually 400x400 meter area
- Marked on all four corners by barber poles
- Marked by yellow smoke





MEDEVAC





- It is not the OCs responsibility to call in real world MEDEVAC
- At a minimum the leadership should have on-hand a red star cluster and red smoke
- Each vehicle will have a GTA card describing NTC MEDEVAC procedures

Fixed MEDEVAC FM freq. is 38.900



General Safety



100% Accountability at all times!!!

- Heat injury is the number 1 injury at the NTC
- Review heat and cold weather injury procedures
 - -Drink plenty of fluids and eat properly
 - -Develop work plans
- Units will utilize risk assessments
- Protect against sunburn
- In summer, accomplish tasks early
- Conduct personal hygiene daily





General Safety



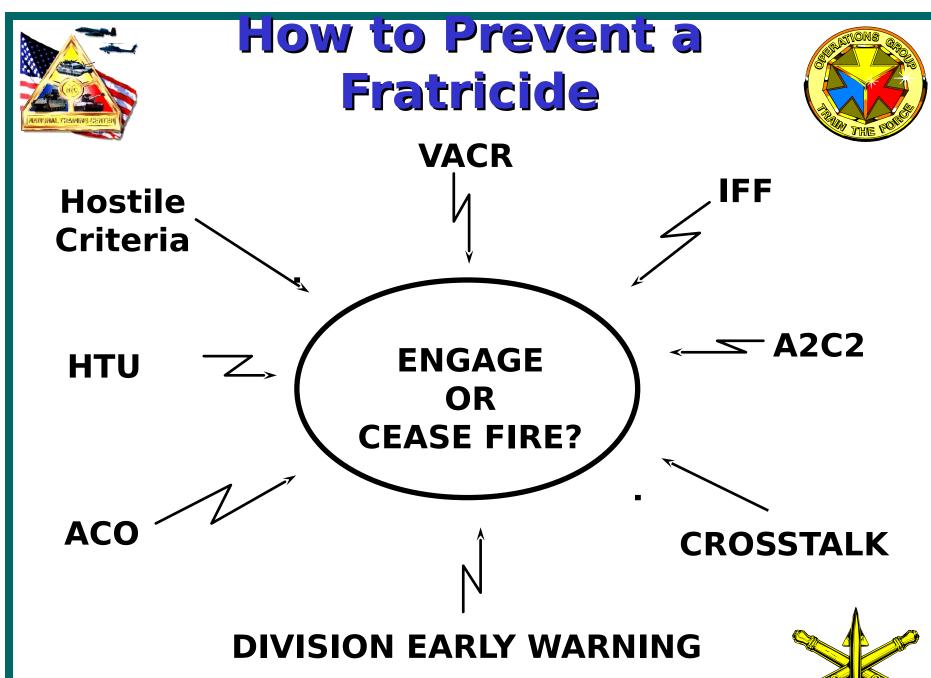
- •Do not pick up any item that looks remotely like a DUD. Do not pick up souvenirs!
- Units must be cautious when occupying wadis. Flash floods occur quickly
- Establish safe sleeping areas
- Sleeping areas will be cordoned off with white engineer tape (I-AA-9)
- Do not sleep in enclosed vehicles with the engine or heater running (I-A-9)
- When erecting OE-254 antennas, soldiers will have leather gloves, Kevlar and eye protection



Fratricide







National Training Center



Force XXI Risk Management



- Identify the hazards
- Assess hazards
- Develop controls
- Implement controls
- Supervise



Includes Tactical Risk and Accidental Risk

- Brief at platoon OPORD and Rehearse!
- Tactical Risk: Hazards that exist due to the presence of the enemy on the battlefield (Obstacles / Air Attack)
- Accident Risk: All hazards concerning friendly personnel, equipment readiness, and environmental conditions



Risk Management



Supervise & Evaluate

Implement Controls

Risk Control
Options &
Decision

Risk Assessment

ID Hazards

Evaluate Controls

Implement New Controls If Needed

Update Risk Assessme nt

National Training Center





Steep cliffs

Insufficient

planning time

Risk Management



1. MSN/TASK: Execute Attack As		ARTEP 7-8-MTP (7-3/4-1100)		Z. DTG BEGIN: 0100 END: 0700	PAGE 1 of 3. DATE PREPARED: 23 Feb XX	
(. PREPARED BY: (Rank/Last name/Duty position)	2LT	Eager, 1st Plt Ldr Co.	В			
5. HAZARDS	6.14	T. CONTROLS	/si	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE ?
Obstacles	E	Develop and use obstacle reduction . plan	Н	Unit TACSOP OPORD Eng handbook	Cont	Y
Inexperienced soldiers	н	Ensure experienced soldiers are distributed throughout the platoon	M	Battle roster	Cont	Y
operating under	E	Use NVDs Use IR markings	E	Unit TACSOP OPORD	PCC/PCI Cont	Y

Worksheet required for each mission Battery level and Platoon!

9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE):

LOW MODERATE HIGH EXTREMELY HIGH

on vehicles

10. RISK DECISION AUTHORITY: (Rank/Last name/Duty position)

LTC Bart, BN CDR







- Vehicle speeds (conditions permitting!)
 - -Wheel day = 35 mph
 - -Track day = 20 mph
 - -Wheel night = 20 mph
 - -Track night = 15 mph
- Light line, no white lights in maneuver area
- Turn lights on when on post
- Air guards and personnel without windshields must wear eye protection







- Use tank trails whenever possible
- Conduct rollover drills
- Seatbelts must be worn at all times
- Vehicles must be configured properly to carry troops
- Troop straps must be in place when transporting casualties and troops
- Tie down equipment securely
- Fuel and water topped off before movement
- Ammo carrier's with ammo can not transport troops.







- Vehicles without operational FM radios WILL
 NOT move on their own
- Travel using a planned route, ensure others are aware of the route taken, this will help if a search occurs
- The battery <u>WILL NOT</u> change bumper numbers
- Track vehicles/Avengers will not operate without intercom
- Use ground guides when backing and in assembly areas







- •Ground guides use red/green lens on flashlights or Chemlites at night
- TCs must remain awake and alert at all times

Track vehicles Convoys will use tank trails to the left and right of the improved tank trail

Use NVGs







Off Limits Areas



- All Dry Lake beds
- Fenced off areas

- 50 meters from all target pits
- 500 meters from fixed structures





Excavation



- •All personnel involved in digging operations that are not in a combat engineer vehicle or armored combat vehicle (ACE) will wear eye protection, flak jacket and Kevlar helmet.
- No digging at night or in electrical storms
- Vehicles must have on-hand proper marking materials for fighting positions, prior to digging.



Excavation



- •At a minimum:
 - -Four U shaped pickets
 - -White engineer tape
 - -Chemlites

 Once the battle is complete, vehicles will remain until position is filled or until the position is properly marked. (I-A-1-1/2)





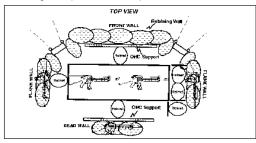
Fighting Positions



FIGHTING POSITION CONSTRUCTION INFANTRY LEADER'S REFERENCE CARD

2-MAN FIGHTING POSITION WITH BILL T-LIP OHC.

STAGE 2: Place Supports for OHC Stringers/ Construct Paraget Retaining Walls (H+.5 -> H+1.5 hrs)



- Leader's Checklist -

Ргераге:

OHC Supports to Front and Rear of Position:

- -Ensure at least 1 foot (about 1-helmet length) or 1/4 cut, whichever is greater, distance from the edge of the hole to the beginning of the supports needed for the OHC
- If logs or cut timber are used, secure in place with strong stakes about 2 to 3 inches in diameter and 18 inches long (short U-shaped pickets will work)
- Dig in about 1/2 height

Front Retaining Wall:

- At least 10 inches high (2 filled sandbags in depth) and two M16s long, rear retaining wall
- At least 10 inches high and one M16 long

Flank Retaining Walls:

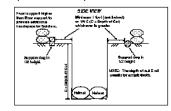
- -At least 10 inches high and one M16 long
- Start digging hole; use soil to fill sandbags for walls

Inspect:

Set back for OHC Supports - minimum of 1 foot or 1/4 depth of cut

FIGHTING POSITION CONSTRUCTION INFANTRY LEADER'S REFERENCE CARD

2-MAN FIGHTING POSITION WITH BUILT-UP OHC STAGE 3: Dig Position/Build Parapets/Place Stringers for OHC (H+1.5-> H+6hrs)



- Leader's Checklist -

Prepare:

Dig position:

- Maximum depth is armpit deep (if soil condition permits)
- Use spoil from hole to fill parapets in order of front, flanks, and rear
- Dig grenade sumps and slope floor toward them
- Dig walls vertically
- If site soil properties cause unstable soil conditions, construct revetments and also consider sloping walls
- Sloped walls: First dig vertical hole and then slope walls at a 1:4 ratio (move one foot horizontally for each 4 feet vertically)

Install revetments to prevent wall collapse/cave-in:

- Required in unstable soil conditions
- Use plywood or sheeting material (Reference page 14) and pickets to revet
- Tie back pickets/posts (Reference FM 5-103)

Place OHC stringers(Reference page 13 for spacing and quantity):

- Stringers: 2"x 4", 4"x 4", or pickets(U-facing down)
- Standard OHC Stringer length 8 ft (Allows for length if sloping of walls occurs)
- L = Stringer Length and h = Stringer Spacing
- Second layer of sandbags in front and rear retaining walls removed to place
- Replace these sandbags on top of stringers once stringers are properly positioned.

nspect:

- Stringers firmly rest on structural support
- Stringer spacing based on values found on page 13
- Lateral bracing placed between stringers at OHC supports
- Revetments built in unstable soil to prevent wall cave-in; walls sloped, if

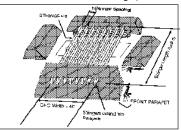
Headquarters, Department of the Army Page 4 of 1" GTA 7-6-1 Dated January 1994

Page 5 of 17

FIGHTING POSITION CONSTRUCTION INFANTRY LEADER'S REFERENCE CARD

2-MAN FIGHTING POSITION WITH BUILT-UP OHC

STAGE 4: Install OHC and Camouflage (H+6 -> H+11 hrs)



- Leader's Checklist -

Prepare: Install OHC:

- -Use plywood, sheeting mat or foxhole cover for dustproof layer (could be boxes, plastic panel, interlocked U-shaped pickets (Reference page 14). Standard dustproof layer is 4'x4' sheets of 3/4-inch plywood centered over dug position.
- -Nail plywood dustproof layer to stringers.
- -Use minimum of 18 inches of sand-filled sandbags for overhead burst protection (4 layers). As a minimum, these sandbags must cover an area that extends to the sandbags used for the front and rear retaining
- Use plastic or a poncho for waterproofing layer
- Fill center cavity with soil from dug hole and surrounding soil

Camouflage Position

-Use surrounding topsoil and camouflage screen systems

Inspect

GTA 7-6-1

- Dustproof laver plywood or panels
- Sandbags filled 75% capacity
- Burst layer of filled sandbags at least 18 inches deep
- Waterproof layer in place
- Camouflage in place
- Position undetectable at 35 meters
- Soil used to form parapets, used to fill cavity, or spread to blend with

surrounding ground

Headquarters, Department of the Army Dated January 1994

Page 6 of 17

GTA 7-6-1

Headquarters, Department of the Army Dated January 1994

National Training Center





Lost in the Desert



- Positive control over personnel must be maintained to prevent safety issues and LID
- Lost in the desert
 - -Stay in open terrain
 - -Do not leave your vehicle (except in emergencies)
 - -Vehicles are easier to find than individuals
 - -Utilize panel markers
 - -Use mirrors for signaling
 - -Remain in radio contact
 - -Seek cover from the sun





Wildlife



- Leave all types of wildlife alone, take all bites seriously, get medical attention ASAP.
- Do not attempt to feed any wildlife

Desert Tortoises

If you encounter a desert tortoise leave it alone, if it is in immediate danger carefully move it, hold it level to prevent urination (this will cause the tortoise to loose all body fluid and die). Also move it in the direction it was traveling. If in doubt call your OC to help with the situation. It is possible to receive a 50,000 dollar fine for killing a tortoise.



Safety Summary



- Everyone must understand MEDEVAC procedures
- Safety is everyone's responsibility
- Accountability must be maintained at all times!!!!
- Execute a safe rotation



WORLD CLASS TRAINING FOR THE WORLD'S BEST ARMY.





NTC Threat







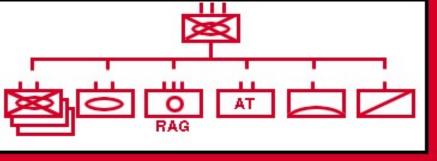


VISMOD

(VISUAL MODIFICATION)

EQUIPMENT

T-80 BMP HIND BRDM 2A45 (AT GUN) ASETIV-SA14, SA8,SA9, ZSU



180 KILLERS

ACTUAL THREAT EQUIPMENT

BRDMs BMPs MT-12s MT-LBs

BMP-2s ACRV





OPFOR



The OPFOR is:

- Well trained
- An expert in the use of miles
- An expert in using the NTC terrain

The Hind:

- Is a desert camouflage UH-1 mock up
- MILES belts are above the nose and above and below both cargo doors
- The pilots are experts in using terrain masking techniques





Offensive Missions



- Meeting Battle
 - Enemy is moving or location is unknown
- Deliberate Attack/Penetration Mission
 - Attack Against a Defending Enemy
- Other Offensive Offensive Missions
 - Raiding Detachment
 - Recon Detachment Training Center



Types of Defense



- Defense Out of Contact
 - Security Zone
 - 1st Echelon Defense
- Defense in Contact
 - Covering Zone
 - Forward Position
 - Active Defense!!! [local counterattac



Defense is only temporary- Resume the Attack!



OPFOR Imperatives



- Successful Reconnaissante
- Shape the Battlefield
 Light Companies, Engineers,
 Special Munitions
- Simultaneous Attacks in Battlefield Depth
- Protect the Force
 Get every system into the fight
- Mass Combat Power
 Retain the ability to maneuver
 Implies the Use of Red Air





The Air Threat at NTC

- CONTINUE TO SE
- THE OPFOR AIR WILL SUPPORT THE OFFENSE IN 4 PHASES:
 - PHASE I: SUPPORT FOR MOVEMENT FORWARD
 - PHASE II: AIR PREPARATION
 - PHASEIII: SUPPORT OF THE ATTACK
 - PHASE IV: AIR ACCOMPANIMENT
- IN THE DEFENSE HELICOPTERS ARE NORMALLY HELD IN RESERVE AS A MOBILE COUNTERATTACK FORCE BUT CAN BE USED TO SUPPORT THE COVERING FORCE, REPULSE AN ENEMY ATTACK, SUPPORT COUNTER ATTACKS AND RECONNAISSANCE STRIKE GROUP. (TRADOC PAM 350-16)



Timeline



H-36 Division Recon R

H-12 Regimental Recon/ Infantry Infiltration

H-45min CRPs RL

H FD or FSE (AG) RL

H+1 MRR Main Body

H+2 MRR Second Echelon



Division Reconnaissance

MISSION - zone and route recon to confirm enemy location and intent

Engage HVT based on CDR







MISSION - Zone and route recon to confirm

enemy situation and answer

PIRs







Task Force Destroyer



MISSION - [Task] seize key terrain and/or destroco/TM; [Purpose] protect the flank of the MRR



- Truck insert and move dismounted
- Light IN 100 PAX / 3x AT-5 / 1x 120 m
 Mortar BTRY





Task Force Angel



MISSION- [Task] Seize key terrain and/or destroy enemy; [Purpose] Protect the flank of the MRR

- Light Company (100PAX / 3x AT-5s /4x 82mm r
- Truck insert capable
- False insertion and split insertions authorized





National Training Center





Hind (SOKOL)





MISSION - Flank security, support the point of penetration, defeat counterattacks, or conduct armed recon

- AT-6 (spiral), 30mm MG, 57mm rockets
- Max kill range 4000m





Hind in Offensive Ops



- Used as recon on high ground when MRR
 - passes through a defile
- Protects the flanks of the MRR
- Attacks the point of penetration and BPs
 - during breach operations
- Assists during securing the Objective
- Fights as part ned arms team





Hind in Defensive Ops



- Conducts counter-recon operations along the
- flanks, rear, and forward of the FLOT (2 hour
 - duration AM/PM)
- Provides recon and protects any unobserved or weak points of the defensive belt
- Backstops the RP at possible penetration
- Conducts antiinfantry on assailable fl

sions and attacks

WHICH IS RED??





Red Air





MISSION - To destroy counter-attacking or defending enemy forces through the depth of the formation

- sortie number and type vary (F16/A10)
- fly a predesignated altitudes
- controlled by the MRR TAC
- No MILES <u>KILL</u>= Volume of Fire





Counter Air Assault Planning / Targeting



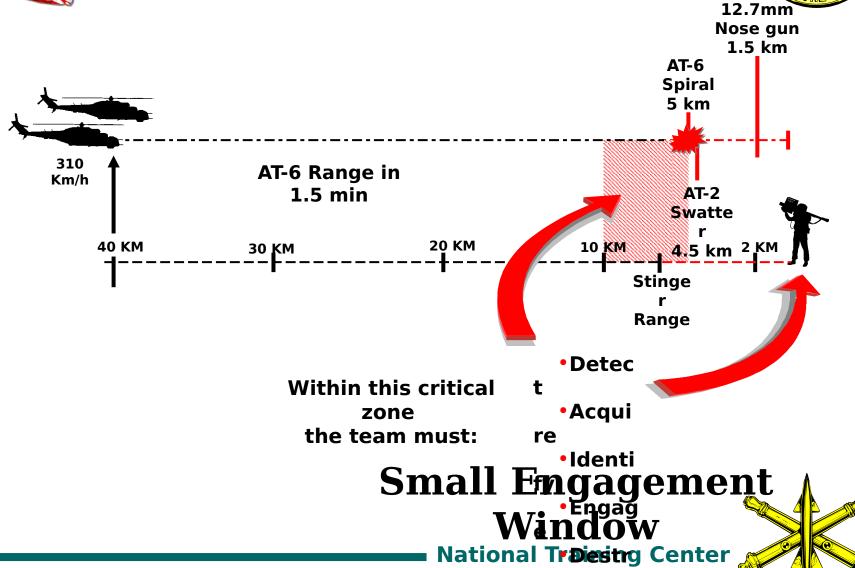








WHY WE NEED EFFECTIVE EARLY WARNING



OV



Planning Considerations



- When, Where is an air assault most likely?
- ID Potential Air Assault Objectives
- ID LZs
- ID Air Avenues of Approach (cover ingress routes)
- Develop a Combined Arms Plan

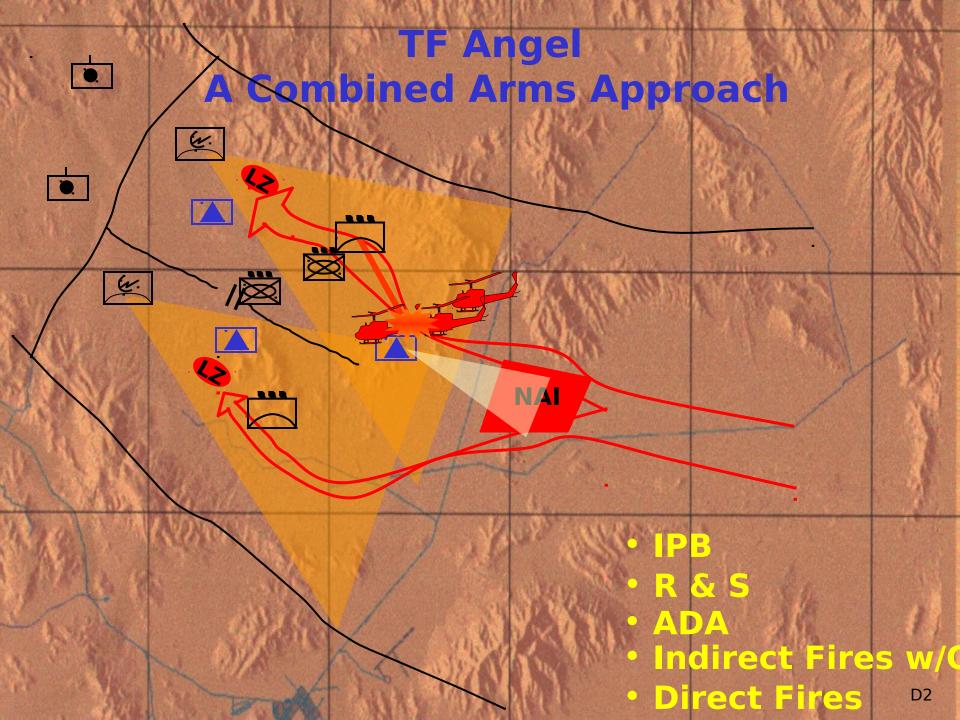


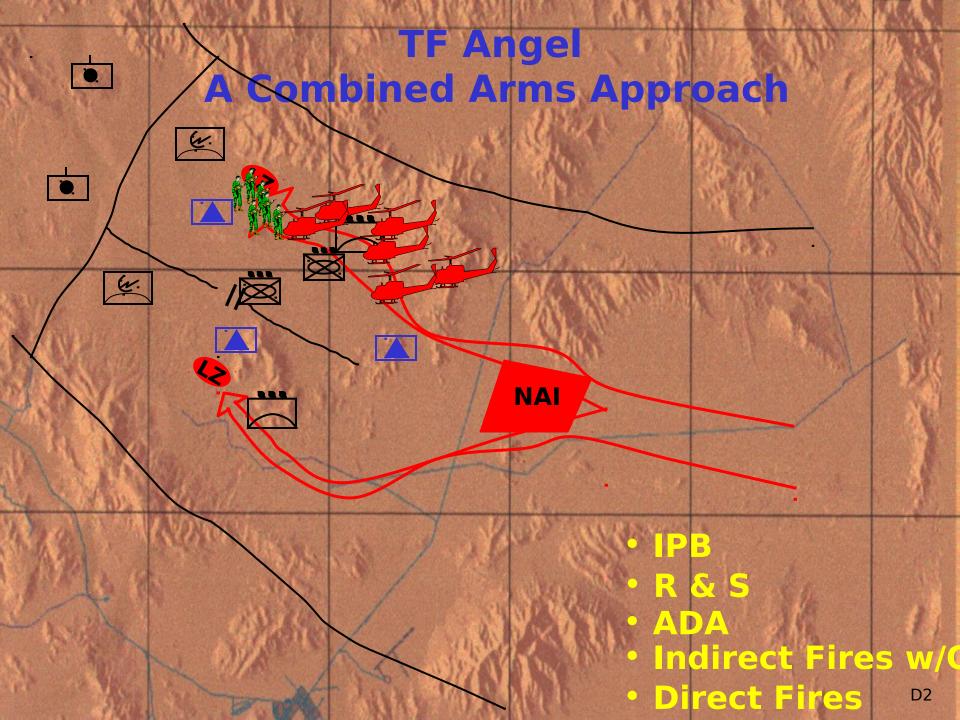


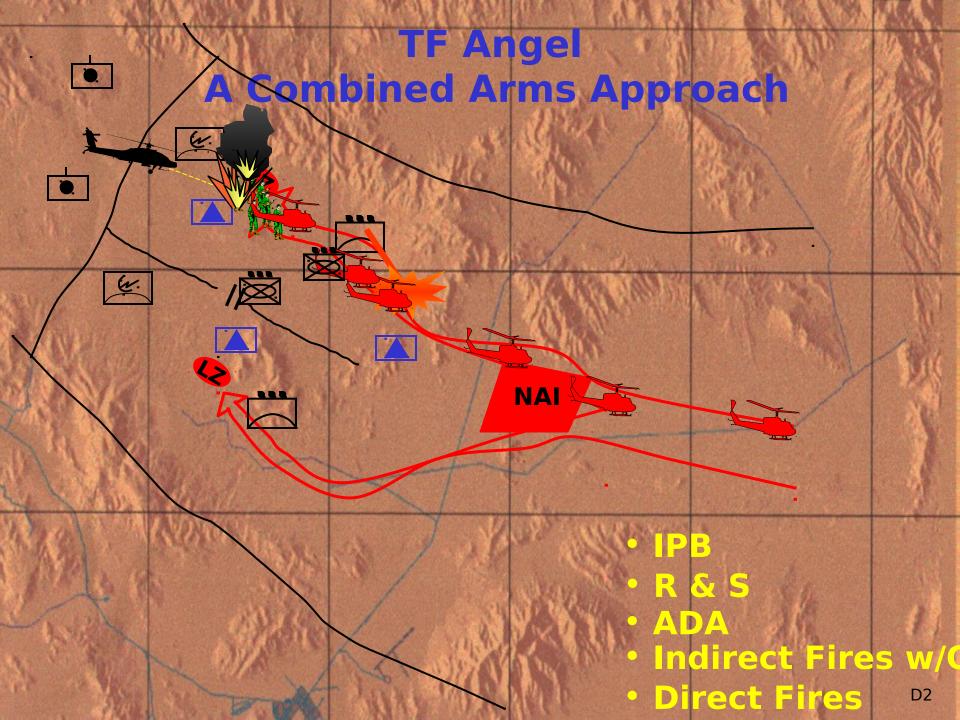
Planning Considerations

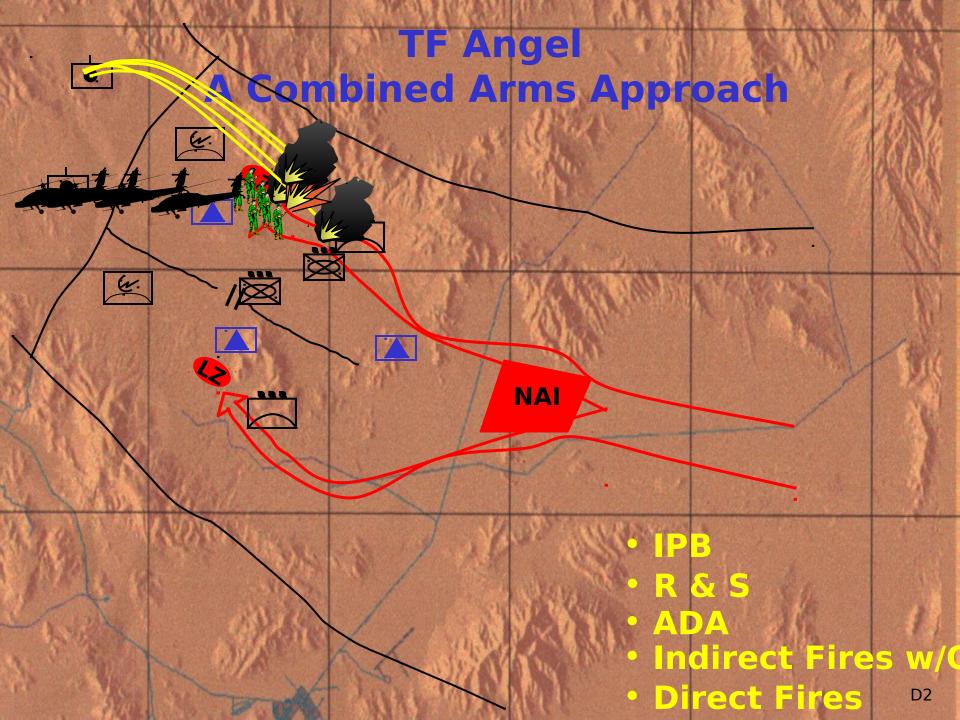


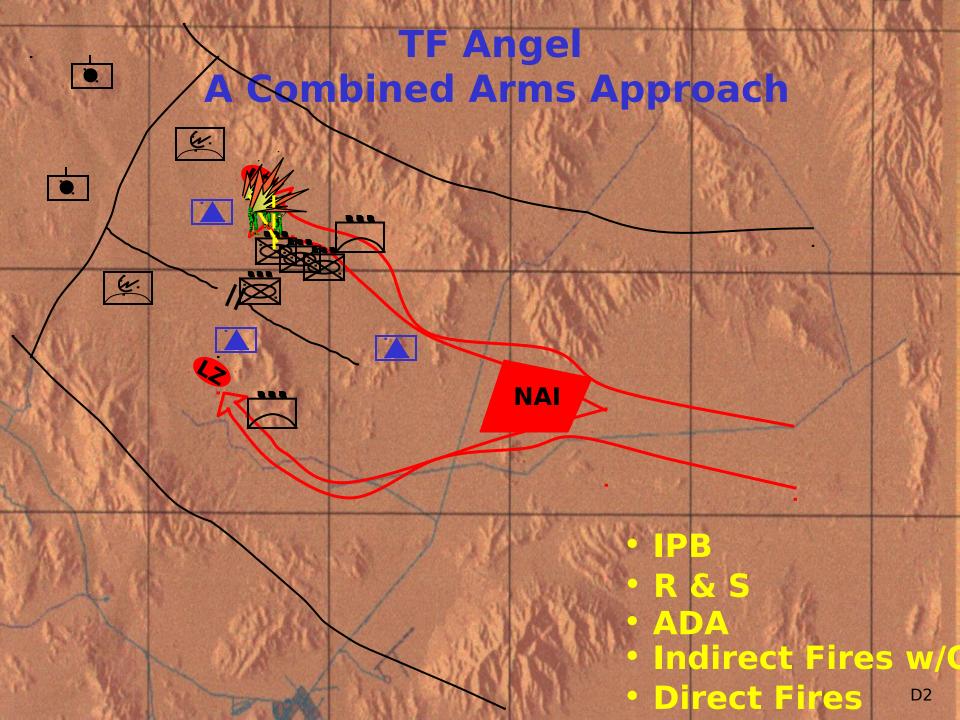
- •Develop a <u>combined arms plan</u>:
 - R&S assets: Scouts & ADA radars position to observe NAIs
 - ADA: Positioned to destroy inbound A/C, team security
 - Indirect Fires: Mortar TRPs with observers on suspected LZs
 - Maneuver/Aviation: Quick Reaction Force (QRF) prepared to destroy dismounts on the ground

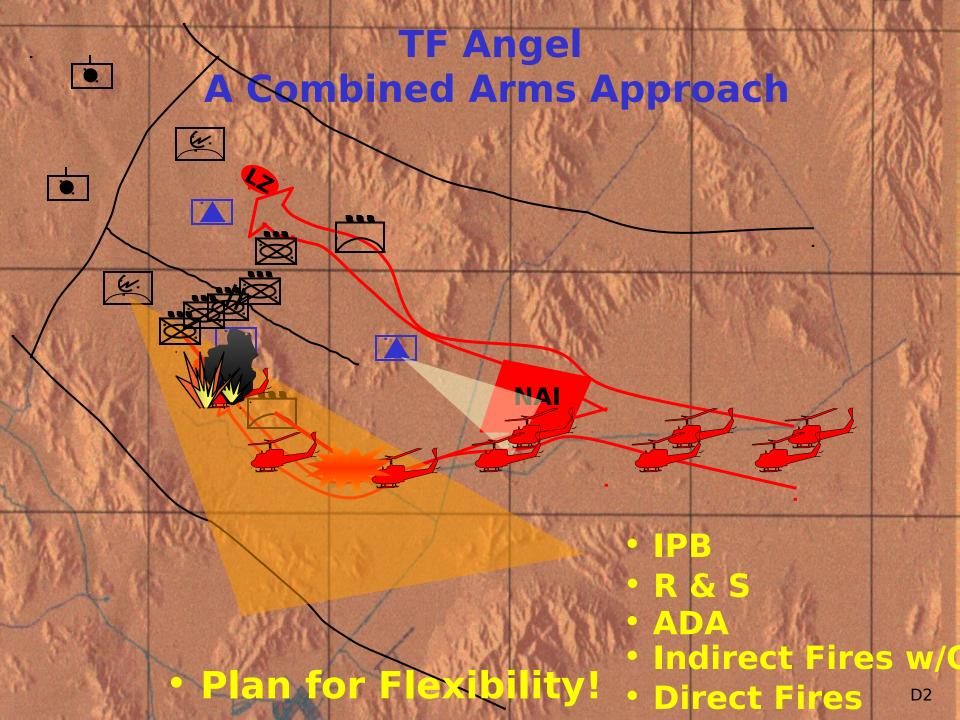














Bde GS Platoon Planning & Employment



- Must clearly understand BCs Task & Purpose for GS Plt
 - Triggers for movement based upon Battery DSM
 - Support Relationships
- Must understand BDE Mission and Scheme of Maneuver
- Coordinate with TF ADA (DS) PLT and understand TF Mission and Scheme of Maneuver
- Define role of Reinforcing or (GS) Reinforcing with (DS) ADA PLTs

National Training Center



Terrain Analysis



- Observation and FOF
 - Consider LOS and FOF for the Air Defender and Enemy Pilot
- Cover and Concealment
 - Contour Flying, Pop-Up Tactics and Masking
- Obstacles
 - Cities, Mountains, Trees
- Key Terrain
 - LZ and DZS, Airfields, Hilltops, Ridgelines
- Approach
 - Valleys, River Beds, Support Ground Maneuver Forces, Probable Air HVTs



Weather Analysis



- Weather Data (BMNT / EENT, Winds, Temperature, Visibility)
- Effects of weather on ADA Systems
- Effects of weather on Threat Air Systems and Weapons





Targetin



Problems:

- ADO generally unprepared to provide useful input
- Often times just a casual observer
- Lack of commanders guidance
- Unclear as to the endstate and what products
 should be developed (FRAGOS in etc.) her





Targeting Analysis



DECIDE Reconnaissance (RISTA)

Resupply (Sustainment of enemy HVTs)

DETECT DEW, LSDIS

Stinger, Avenger

Scouts, Maneuver

Artillery, Army Aviation, CAS

DELIVER Maneuver, Stinger, Avenger

ATK AVN/CAS, Artillery, NGF, Smoke

ASSESS Stinger, Avenger, AVN, Maneuver

Bottom Line: You must do your homework prior to the targeting meeting (Air Event Template...Rub elbows with the S2)



Targeting



What we should bring:

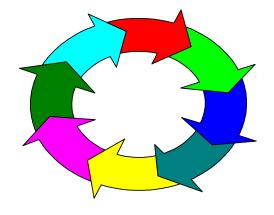
Situational Template - Graphically depicts how the enemy might deviate from doctrinal tenets to accommodate the realities of geography or weather. It shows how AAAs are adjusted to most likely corridors.

Event Template - Graphically depicts significant battlefield events and activities which help indicate enemy COAs. It facilitates comparing what we know the enemy can do with what he is doing, and thus predict what he will do next.



AIR IPB





I wish to examine the enemy's external appearance and so know his internal situation; to examine his advance and know when he will stop and thus determine the outcome.

The Art of War
Sun Tzu





Aerial Portion of IPB



Air Threat Courses of Action

Relate the enemy's air, counterair, air defense, airborne, and air assault doctrines with the effects of weather and terrain to determine how the enemy will employ their assets.

"Preparation and the continuous updates of aerial IPBs are fundamental to the execution of the air $\frac{1}{FM} \frac{1}{34-130}$ on the modern

Intelligence Preparation of the Battlefield p.p. 4-1 thru 4-3





Where To Fight



ESSENTIAL STEPS

WHERE IS THE ENEMY GOING? WHERE MIGHT HE GO?

WHERE DO WE WANT TO MASS FIRES TO KILL HIM?

ARRAY FORCES (HOW MUCH COMBAT POWER DO WE NEED)?

ID TIME/DISTANCE FACTORS.
BACKWARDS PLAN EVENT TRIGGERS.

ID R&S NEEDS TO CONFIRM OR DENY COA. RATIOS OR DELAY KEY INDICATORS, ID DECISION POINTS.

DISRUPT ENEMY

ID DEEP FIGHT
OBJECTIVES; TO
ENHANCE FORCE
RATIOS OR DELAY
DISRUPT ENEMY
MOVEMENT.





Aerial Portion of IPB



- Must be included on the SITEMP (S-2)
- Requires continuous updates and refinement
- Linked to the ground threat!
- Do not determine air COAs in isolation of the maneuver forces they support





Aerial Portion of IPB



Specific considerations include:

- Probable target installations or areas.
- Likely AAAs (Do they provide ease of navigation
- Do they provide protection to the aircraft from and weapons?
- Do they allow evasive maneuver?
- Do they support ground force operations?
- Likely standoff attack orbits.
- Line of Sight from proposed ADA weapon loca





NTC ADA TRENDS







NTC ADA TRENDS AREAS WE WANT TO SUSTAIN





















NTC ADA TRENDS AREAS ON AN UPWARD TREND





FAAD C3I CONNECTIVITY



AERIAL IPB INTEGRATION



SENTINEL RADAR EMPLOYMENT



NTC ADA TRENDS

AREAS WHERE WE CAN IMPROVE



* REHEARSALS



A2C2 COORDINATION



EMPLOYMENT OF GS ASSETS



FAAD C3I OPERATIONS



PRE-COMBAT INSPECTIONS



DEFEATING THE NIGHT RW THREAT



NTC ADA TRENDS

AREAS WHERE WE CAN IMPROVE



FULL UTILIZATION OF LIVE FIRE



HEAVY / LIGHT INTEGRATION



★ BCT / TF INTEGRATION



RSOI (BUILDING COMBAT POWER)



PSG ROLE ON THE BATTLEFIELD



NTC ADA TRENDS

AREAS WHERE WE CAN IMPROVE



BATTLE TRACKING



CASEVAC



RESUPPLY



TIME MANAGEMENT (TLP)



PSG ROLE ON THE BATTLEFIELD





NTC ADA TRENDS REHEARSALS



- NORMALLY CONDUCTED WITHOUT ALL KEY LEADERS PRESENT (BATTERY)
- NOT REHEARSING OUR ACTIONS WHEN FRIENDLY AIR
 IS OPERATING IN SECTOR
- NOT REHEARSING CSS OPERATIONS
- NOT ATTENDING TF OR BCT CSS REHERSEALS (DON'T UNDERSTAND OUR ROLE IN THE REHERSEAL)
- NOT REHEARSING SENSOR MANAGEMENT National Training Center



NTC ADA TRENDS A2C2



- WE HAVE DIFFICULTY IN ACHIEVING/SUSTAINING
 IFF
 VERIFICATION
- WE DO NOT ROUTINELY DISSEMINATE A2C2 GRAPHICS DOWN TO FIRE UNIT LEVEL
- WE DO NOT CONSISTENTLY DISSEMINATE FRIENDLY AIR ACTIVITY OVER BATTERY COMMAND NET





NTC ADA TRENDS EMPLOYMENT OF GS ASSETS



- RADARS NOT INTEGRATED INTO R&S PLAN
 - * BCs UNSURE "HOW TO FIGHT" RADARS
 - * POOR SITE SELECTION AND POSITIONING
 - * NOT DEVELOPING TRIGGERS FOR MOVEMENT
 - * NOT COORDINATING FOR FORCE PROTECTION
- AVENGERS/STINGERS NOT INTEGRATED INTO OVERALL

SCHEME OF MANEUVER

- * LATE LINK UP WITH TFs / SUPPORTED UNIT
- * POOR ADJACENT UNIT COORDINATION
- * POOR COMMAND / CONTROL
- * POOR SITE SELECTION / POSITIONING
- * PLANS TO REPOSITION ARE NOT DEVELOPED
- * POOR COMMUNICATIONS
 National Training Center



NTC ADA TRENDS FAADC3I OPERATIONS



- NOT OPTIMIZING USE OF AMDWS FOR PLANNING
- WE AVERAGE 75% LINK DURING RSOI AND 50%
 OR
 LESS WHILE DEPLOYED
- SOPs DO NOT INCLUDE DETAILED TROUBLESHOOTING PROCEDURES





NTC ADA TRENDS PRE-COMBAT INSPECTIONS



- PL/PSG/SEC SGTs DO NOT UNDERSTAND THE DIFFERENCE BETWEEN PCCs and PCIs
- PCIs AT HOMESTATION ARE INCOMPLETE
- PCC LIST DO NOT DIFFERENTIATE BASED ON METT-T
- PCIs IN THE FIELD ARE NOT ROUTINELY CONDUCTED
- WE DO NOT INCLUDE TIME FOR PCIs IN OUR PLANNING TIMELINE (NOT INCLUDED IN WARNO OR OPO)
- WE DON'T ASSOCIATE THE INSPECTIONS WITH TIME (I.E HOW LONG IT TAKES TO CONDUCT THESE INSPECTIONS

National Training Center

NTC ADA TRENDS DEFEATING THE NIGHT RW THREAT

- POOR COMBINED ARMS INTEGRATION
- POOR SOR MANAGEMENT
- POOR SITE SELECTION AND POSITIONING



NTC ADA TRENDS FULL UTILIZATION OF LIVE FIRE

- NOT ALL BSFV / LINEBACKER / AVENGER CREWS TABLE VIII / STRAC CERTIFIED
- UNIT'S NOT TAKING ADVANTAGE OF STINGER AND M3P LIVE FIRE POSSIBILITIES
- CAFADS CAPABILITIES/TECHNIQUES NOT BEING DISSEMINATED TO THE FORCE





NTC ADA TRENDS HEAVY / LIGHT INTEGRATION



- LACK OF PRIOR COORDINATION
- ACTIONS DURING RSOI
- EARLY WARNING
- SERVICE SUPPORT





NTC ADA TRENDS BCT / TF INTEGRATION



- ADOs LACK A CLEAR UNDERSTANDING OF THEIR ROLE IN THE MDMP PROCESS
- UNDERDEVELOPED AERIAL IPB (NOT INCLUDED ON SITEMPs)
- ENG / MP SUPPORT FOR FORCE PROTECTION IS AN AFTERTHOUGHT
- PARTICIPATION/SCRIPT FOR REHEARSALS
- EARLY WARNING PLAN AND HOW THE FORCE National Training Center
 WILL BE

NTC ADA TRENDS RSOI (BUILDING COMBAT POWER)

- TIME MANAGEMENT
- CDR / XO / 1SG TRYING TO DO IT ALL
- IFF VERIFICATION CHECKS
- COMPLETING DRIVER'S TRAINING
- ZEROING OF WEAPONS
- HOMESTATION PCCs / PCIs INADEQUATE
- ARE WE ENTERING THE FIGHT AT NEAR 100% CAPABILITY



- PSG/1SGs DO NOT PARTICIPATE IN THE MDMP PROCESS (CAN'T AND DON'T COACH, TEACH, AND MENTOR PLs)
- AD PLANS ARE DEVELOPED WITHOUT CONSIDERING WHETHER IT CAN BE LOGISTACLLY SUPPORTED
- PSG/1SGs DON'T UNDERSTAND HOW OR WHAT TO BATTLE
 TRACK ON A DAILY BASES AND DURING A BATTLE
- INADEQUATE OR NO CSS SOPs
- DON'T KNOW HOW TO DEVELOP A CSS SYNCH MATRIX
- ・ PSG/1SGs DO NOT UTILIZE TRACKING MECHANISMS MAINTAIN RUNNING ESTIMATES (と大名が対し生でのすりである。



- Operational Tracking
- Friendly Disposition
- Enemy Disposition
- NBC / Minefields
- Combat Power (Attachments)
- IFF STATUS
- SHTU/HTU

CSS Status

- LOGSTAT Reports
- CL I Ration Cycles
- CL III, IV, V
- Transportation Assets
- Personnel Replacements
- Maintenance / Recovery / WSRO
- 5988E Flow

CSS Elements (locations)

- FTCP GREG
- UMCP EPW
- Trtmt Tms CCP
- AXP's LRP
- Decon Pts FLE

CL IV / V Pts Concept of Support

- BCT / TF CSS Graphics
- Mission Analysis
- LOG Estimate
- Wargaming / Orders / Rehearsals
- CSS Critical Events
- Adjacent Unit Coordination
- LOGPAC Time / Location

Nacional Action Constant





EXAMPLE PSG RUNNING ESTIMATE CARD

	• TEAM 1	• TEAM 2
•COMBAT POWER		
•TASK ORGAN		
•CURRENT GRID		
•WARNO DTG		
•TIMELINE		
•OPORD DTG		
•REHERSEALS DTG		
•RESUPPLY PLAN		
•CASEVAC PLAN		
•GRAPHICS		
•5988E		
•IFF		
•SHTU/HTU	• **ETC**	



CASEVAC

- PSG/1SGs DO NOT PARTICIPATE IN THE MDMP PROCESS (THEY RELY ON INFO BEING DESSIMINATED DOWN TO THEM)
- PSG/1SGs ARE NOT PRODUCING PARA 4 OF OPORD
- PSG/1SGs DON'T UNDERSTAND WHO TO GET INFO FROM
- INADEQUATE OR NO CASEVAC SOPs
- DON'T KNOW HOW TO DEVELOP A CASEVAC SYNCH MATRIX
- PSG/1SGs DO NOT UNDERSTAND HOW CHS ASSETS ARE EMPLOYER
- BTYRs RARELY LD WITH CSS GRAPHICS
- 1SGs DO NOT PLAN NOR ASSIST GS ASSETS
- NOT ENOUGH COMBAT LIFESAVERS IN UNITS



National Training Center



NTC NCO ADA TRENDS RESUPPLY

- PSG/1SGs DO NOT PARTICIPATE IN THE MDMP PROCESS
- AD PLANS ARE DEVELOPED WITHOUT CONSIDERING WETHER IT CAN BE LOGISTACLLY SUPPORTED
- PSG/1SGs DON'T UNDERSTAND WHAT THEIR UNITS UBL IS
- INADEQUATE OR NO RESUPPLY SOPs
- DON'T UNDERSTAND THE DIFFERENT TECHNIQUES AVAILABLE TO RESUPPLY DS OR GS ASSETS
- PSG/1SGs DO NOT DEVELOP EXECUTION MATRIXs (NO PRE PLANNED TRIGGERS OR DECISION POINTS FOR RESUPPLY—NO GRAPHICS)
- 1SGs DO NOT PROVIDE GS ASSETS SUPPORT





NTC NCO ADA TRENDS TIME MANAGEMENT (TLP)

NCOs DO NOT ASSIST THE PL IN RAPIDLY ESTABLISHING
 A
 TIMELINE THAT INCLUDES ALL THE CRITICAL TASKS
 THAT
 MUST BE COMPLETED PRIOR TO MISSION TIME. (orders, rehearsals, PCCs/PCIs, leader's recon, boresight, resupply, rest, etc.)





PSG ROLE ON THE BATTLEFIELD

- UNDER-UTILIZED BY PLATOON LEADERS
- NOT CONSISTENTLY CONDUCTING PCIs
- DO NOT FACILITATE PLATOON REHEARSALS
- COMFORT LEVEL IN TOCs IS LOW (BATTLE STAFF TNG)
- NOT UTILIZING 3KW GENERATOR OR CONVERTER FOR IFF PROGRAMMING
- BATTLE TRACKING / REPORTING TO SUPPORT TF / BTRY
 National Training Center



Questions or Comments







Contact Information



Operations Group (Scorpion Team)

Mechanized Task Force ADA Trainers

Fort Irwin, CA 92310

DSN: 470-2272/4279

EMAIL: scorpion16@irwin.army.mil

WEBSITE:

http://www.irwin.army.mil/opsgrp

CPT Mike Essary

SFC Steven Jones

National Training Center